



UNITED STATES DEPARTMENT OF COMMERCE  
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07/566,083 08/10/90 KRUG

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EXAMINER

HAYES, G

ART UNIT

PAPER NUMBER

2311

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DATE MAILED:

05/21/92

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

This application has been examined  Responsive to communication filed on 5-9-91  This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1.  Notice of References Cited by Examiner, PTO-892.
2.  Notice re Patent Drawing, PTO-948.
3.  Notice of Art Cited by Applicant, PTO-1449.
4.  Notice of Informal Patent Application, Form PTO-152.
5.  Information on How to Effect Drawing Changes, PTO-1474.
6.

Part II SUMMARY OF ACTION

1.  Claims 1-62 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2.  Claims \_\_\_\_\_ have been cancelled.

3.  Claims 3-11, 28-33, 51-54, 57-62 are allowed.

4.  Claims 1-2, 12, 34-45, 27, 55-56, 49-50 are rejected.

5.  Claims 13-26, 46-48 are objected to.

6.  Claims \_\_\_\_\_ are subject to restriction or election requirement.

7.  This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8.  Formal drawings are required in response to this Office action.

9.  The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are  acceptable.  not acceptable (see explanation or Notice re Patent Drawing, PTO-948).

10.  The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_ has (have) been  approved by the examiner.  disapproved by the examiner (see explanation).

11.  The proposed drawing correction, filed on \_\_\_\_\_, has been  approved.  disapproved (see explanation).

12.  Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has  been received.  not been received  been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.

13.  Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14.  Other

EXAMINER'S ACTION

1. Claims 27 and 55 are objected to under 37 C.F.R. § 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See M.P.E.P. § 608.01(n). Accordingly, these claims have not been further treated on the merits.

2. 35 U.S.C. § 101 reads as follows:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

Claim 56 is rejected under 35 U.S.C. § 101 because it is directed to non-statutory subject matter.

The invention as recited in claim 56 is directed to a lookup table. The Examiner respectfully asserts that the a table is an arrangement of data which does not fall within any of the statutory areas recited above. It is neither an apparatus or process but is more akin to printed matter. For this reason, the Examiner respectfully asserts that the invention as recited in claim 56 is directed to non-statutory subject matter.

4. Claim 56 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear from current claim language it is unclear whether the invention is directed to an apparatus or a method.

3. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

A. Claims 1-2, 12, 34-35, and 36-45 are rejected under 35 U.S.C. § 103 as being unpatentable over Rutt in view of Delange.

Rutt et al. is directed to a tomography system which makes use of dual energy levels to inspect a patient (i.e., an ensemble of physical objects). The system includes means to generate images of structures found within the patient. The Examiner respectfully asserts that the displayed image of the Rutt system includes various subareas comprising the image. The image is of course representative of the attenuation of x-rays at each energy level. The invention as recited in claim 12 differs from Rutt in that means to compare differences in attenuation of subareas is recited as well as means to indicate the presence of specific material based on the comparisons.

Delange is directed to a system for determination contrasting objects within an image. In order to detect the presence of an object, the Delange system functions to compare background values

with luminance values for each pixel. Those pixels having a greater value contrast with the background and are thus objects. The Examiner respectfully asserts that once the image is obtained using the Rutt system one skilled in the art would be free to chose any readily available means for processing the image data such as that disclosed by Delange. Claim 12 is rejected

As discussed in the rejection of claim 12, the Rutt-Delange combination includes means for detecting a specific material (i.e., a specific organ in the body) on the basis of comparisons of dual energy transmission information. Finally, the Delange system discloses comparisons of selected subareas (i.e., each pixel) and if data is obtained through use of the Rutt system, the data compared via the Delange system would be on the basis of dual energy x-rays. Claim 1 is rejected.

Use of dual energy x-rays to detect items has been discussed above. The Examiner respectfully asserts that specification of the item to be detected as a bomb is a design choice. Claim 2.

The Examiner respectfully asserts that if two energy levels are needed one obvious method would be to generate the necessary levels from the source. Further, collimating means are well known in the tomography area and the object must intercept the x-ray beam in order for attenuation data to be generated. Claim 34 is rejected.

The Delange-Rutt combination makes use of display means. Further, Delange makes use of pixel comparison means to detect an

object in a video image. Claim 35 is rejected.

Claims 36-45 recite specific examples of the material being detected. The Examiner respectfully asserts that it would be a matter of design choice which of the numerous existing items would be imaged using the Rutt-Delange combination. Specification of the item to be imaged does not alter the device which is used for imaging. These claims are therefore rejected.

B. Claim 56 is rejected under 35 U.S.C. § 103 as being unpatentable over any computer stored table. Use of tables as form of storing data in computers is well known. The Examiner respectfully asserts that the particular data stored therein is a design choice and does not constitute a patentable difference. Claim 56 is rejected.

-REMARKS-

Page 69 makes reference to an attached appendix. None is however found with the specification. Was an appendix in fact submitted?

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gail Hayes whose telephone number is (703) 308-1670.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 0754.

Serial No. 07/566,083  
Art Unit 2311

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g.o.h.  
May 1, 1992

*Gail Hayes*  
GAIL O. HAYES  
PATENT EXAMINER  
GROUP 230